

I-11.01 Plan Revisions Prior To Bid Opening

1. Plan Revisions (prior to authorization) – Revisions to plans after originals have been sent to Planning and Programming Division should be reviewed by the Design Engineer, appropriate Program Manager, Bridge Engineer, or District Engineer. The intent of this requirement is to provide a process which generates final plans by the plan completion date with an absolute minimum of changes. An emphasis on checking plans by designers and supervisors is therefore required.
2. Plan Revisions (after authorization - prior to bid opening) – Addendums to plans that have been submitted to contractors should be approved as in the paragraph below. It is the intention here that only necessary addendums are developed. Plan revisions that can be delayed should not be processed until after the bid opening date and should then be processed as ordinary change orders (see Section I-11.02). Procedures for developing an approved addendum are as follows:
 - a. Prepare a memo detailing required plan changes to the Design Engineer, Bridge Engineer, or District Engineer to review and initial.
 - b. All plan sheets being revised should be annotated with the revision date and sealed, signed, and dated by the engineer who is in responsible charge.
 - c. The original sealed hard copy of the revised plan sheets and memo go to Planning & Programming Division, as well as a revised cost estimate if there are any changes in the quantities or costs.
 - d. The revised plan sheets, memo, and cost estimate shall also be submitted electronically in the form of .pdf files. The revised plan sheets .pdf file and cost estimate .pdf file shall both be placed separately under the appropriate bid opening folder in the O:\81 Special Projects\DIP PLANS by the designer. The designer shall email **-Grp-DOT Bids Addenda** the memo describing the plan changes, and that the revised plan sheets and cost estimate have been placed in the respective O:\81 Special Projects\DIP PLANS bid opening folder. This will notify Planning & Programming and Construction Services that the electronic addendum has been completed.
 - e. The designer should obtain verbal approval from FHWA for all addenda that are initiated on functional or major changes within the division or for any changes occurring two weeks after the plan completion date. Minor changes such as typos would not need approval from FHWA.

- f. All efforts shall be made to coordinate addendums with Construction Services Division (and any other Division) prior to posting addendums, so that multiple plan revisions can be processed together, potentially reducing the number subsequent addendums for a project.
3. Consultants should prepare a memo to the Design Engineer, Bridge Engineer, or District Engineer. The memo and original sealed hard copy plan sheets, as well as the electronic copies shall be submitted to the Technical Support Contact. The Technical Support Contact will follow procedures described above.

I-11.02 Construction Phase Revision after Bid Opening (Change Orders)

1. Construction phase revisions after the bid opening that are required as a result of plan error, plan omissions, changes in field conditions, contractor requests, etc. are typically handled through the change order process. These changes will be processed in three different manners, which are: (1) construction phase revisions that do not need to be sealed, signed and dated; (2) construction phase revisions that would be sealed, signed and dated by the project engineer; and (3) construction phase revisions that would need to be sealed, signed and dated by the original registrant. These construction phase revisions need to be evaluated to determine if they affect the functional design or are within the inherent variability from design in normal construction practices. The project engineer will work with the Bridge, Design, or Materials and Research Division, and the District Engineer to determine which revisions will require sealing, signing and dating and who's seal would be required.

At a minimum, the change orders should include a description of why the change is being made and supporting data (i.e. pictures, sealed and signed plan sheet(s) or memorandum that has been sealed and signed).

- a. Construction phase revisions that do not need to be sealed, signed or dated:

Some construction phase revisions that are administrative changes that do not affect either the design or physical features of the project do not need to be sealed, signed or dated. Examples of these changes would include changes regarding contract time, changes concerning partnering, changes resulting from differing funding sources, etc. These changes would be processed by the project engineer and would not need to be sealed, signed or dated.

- b. Construction phase revisions that would be sealed, signed and dated by the project engineer:

Construction phase revisions that are within the inherent variability of normal

construction practices and do not affect the functional design requirement, need to be sealed, signed and dated by the project engineer or their direct supervisor. Examples of these types of changes include changes in widths to bike paths or sidewalks, minor changes to pipe grades, minor changes to ditch width, minor changes to inslopes, etc. These revisions are sealed, signed and dated by the project engineer and included in the change order. The project engineer needs to revise the project “as built” drawings to ensure that all the project changes are reflected on the final “as built” plans.

- c. Construction phase revisions that would need to be sealed, signed and dated by the original registrant:

Construction phase revisions that are outside of inherent variability or result in a functional design change need to be sealed, signed and dated by the original registrant, unless the original registrant is “not able.” The original registrant is defined as being “not able” if they were a consultant who designed the project but their contractual responsibility has expired or if the original registrant is no longer employed with the DOT or the original registrant is temporarily unavailable. In either case, the DOT may authorize another duly registered individual to make the revisions to sealed documents and to seal, sign and date the revisions. A duly registered individual making changes to final sealed documents must assume responsible charge and reseal the directly related final documents. Examples of these types of revisions include structural changes, lane width, shoulder width, specification changes, stopping sight distance, guardrail, superelevation, horizontal and vertical alignments, etc. The project engineer will prepare the change order and include the sealed, signed and dated revisions from the original registrant. The project engineer needs to also revise the project “as built” drawings to ensure that all the project changes are reflected on the final “as built” plans.

2. Plan revisions produced in Design or Bridge Division, or received from Materials and Research Division (plan revisions produced in Materials and Research are forwarded to the Design Division), should follow the procedure below:
 - a. Follow Chapter 7.4 (Change Orders) of the CADD Standards Manual.
 - b. Prepare a memo describing the changes for each sheet, including any changes in quantities (with estimated change in costs based on contract bid prices) to the Design or Bridge Engineer to review and initial.
 - c. Send an electronic copy of the revised plan sheets and memo to the District Office.

- d. Send the original memo and the original sealed hard copy of the plan sheets to the Records Center as follows:
 - i. Staple and 3-hole punch the memo and plan sheets.
 - ii. Deliver to the Records Center (do not fold or bend).
 - iii. Records center will log the revisions and place the sheets with the original plans. When the Records Center is notified that the project has been finalized, the originals will be filmed.
- 3. Plan revisions that are produced by consultants should follow the procedure below:
 - a. Prepare a memo describing the changes for each sheet, including any changes in quantities (with estimated change in costs based on contract bid prices) for the Design or Bridge Engineer to review and initial.
 - b. The memo and original sealed hard copy plan sheets, as well as the electronic copies shall be submitted to the Technical Support Contact.
 - c. Technical Support Contact will follow the procedures outlined in above.